

## Ethanol (E85):

Project implemented by: Todd Strawser

### What is E85 ?

Ethanol is 100% pure grain alcohol produced by fermenting plant sugars, like barley, wheat, and sugar cane fiber; but most ethanol is produced using corn, since it is most easily converted to sugar. E85 is 85% ethanol blended with 15% gasoline. Using E85 instead of gasoline reduces emissions of VOCs by 15%, carbon monoxide by 40%, particulates by 20%, nitrogen oxides by 10%, and sulfates by 80%.

In the 1880s, Henry Ford designed a car that ran only on ethanol, and the Model T was designed to run on either ethanol or gasoline. 120 years later, there are over 160 fueling stations offering E85 in 24 states.



Dodge Stratus – showing E85 compatible on fuel tank lid.

### E85 use at GRC:

GRC recently converted one of our 10,000 gallon gas underground storage tanks to E85, and installed a new E85-compatible fuel dispenser. In September, we received first 8,500 gallon delivery, and began using E85 to fuel our 12 E85-compatible vehicles. We intend to expand the use of E85 by replacing older vehicles with new E85 compatible models during future replacement intervals.

GRC had the third E85 fleet and the fourth fuel-pumping station in Ohio. The Cincinnati post office was first in the state, and the Columbus post office second. The first public station was in Hilliard at a speedway.

According to Todd Strawser, the Big 3 auto makers, Ford, Chrysler, and GM, have been building E85-compatible cars since 1996, and many people buy them without realizing they are compatible.